- PATENT -

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:	Oprescu-Surcobe et al.	EXAMINER:	Cai, Wayne Huu
SERIAL NO.:	10/823,185	GROUP:	2617
FILED:	04/13/2004	CASE NO.:	CE11125R

ENTITLED: WIRELESS COMMUNICATIONS NETWORK AND METHOD FOR ENABLING WIRELESS PRESENCE-BASED SERVICES

Motorola, Inc.
Corporate Offices
1303 E. Algonquin Road
Schaumburg, IL 60196
May 17, 2007

Mail Stop APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

APPEAL BRIEF

Commissioner:

Pursuant to 37 C.F.R. §41.37, the appellants hereby respectfully submit the following Brief in support of their appeal.

TABLE OF CONTENTS

(1) Real Party in Interest

The real party in interest is Motorola, Inc.

(2) Related Appeals and Interferences

There are no related appeals or interferences known to appellant, the appellant's legal representative, or assignee that will directly affect, or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

Claims 1, 2, 6-9, 12-14, 17, and 27-38 are pending and presently stand twice and finally rejected and constitute the subject matter of this appeal. Claims 3-5, 10, 11, 15, 16 and 18-26 are canceled.

(4) Status of Amendments

No post-final amendments have been submitted.

(5) Summary of Claimed Subject Matter

Claim 1 provides a method for enabling wireless presence-based services. The method includes monitoring, by a wireless communications network, messaging and messaging responses of a mobile station (MS), wherein the messaging and the messaging responses do not specify a presence state of the MS or a presence state change by the MS. (FIG. 2, 210 and 201; page 6 lines 1 – 18) The method also includes inferring, by the wireless communications network, a change in the presence state of the MS based upon the monitoring, where inferring comprises inferring the MS presence state has changed when the presence state of the MS indicates that the MS is present and messaging is detected that indicates MS activity of powering down, deregistering, entering an unavailable mode, handing off outside the wireless communication network, and/or involved in other communication. (page 6 lines 19 – 25) The method further includes communicating, by the wireless communications network, the state change to a presence server. (FIG. 2, 225 and 201; page 6 lines 15 – 18)

Claim 28 provides a wireless communications network that includes wireless transceiver equipment adapted to receive messaging and messaging responses of a mobile station and a wireless presence proxy, communicatively coupled to the wireless transceiver equipment. (FIG. 2, 210, 211, 215; FIG. 4, 410, 411, 415; page 5 lines 6-11) The wireless presence proxy is adapted to monitor the messaging and the messaging responses of the MS, where the messaging and the messaging responses do not specify a presence state of the MS or a presence state change by the MS, is adapted to infer a change in the presence state of the MS based upon the monitoring, where being adapted to infer comprises being adapted to infer the MS presence state has changed when the presence state of the MS indicates that the MS is present and messaging is detected that indicates MS activity from the group consisting of powering down, deregistering, entering an unavailable mode, handing off outside the wireless communication network, and involved in other communication, and is adapted to communicate the state change to a presence server. (FIG. 2, 201, 215, 225; FIG. 4, 401, 415, 225; page 6 lines 1-25)

Claim 34 provides a method that includes receiving by a base station (BS) from network equipment a short data delivery message, signaling by the BS a mobile station (MS) in response to the short data delivery message, and sending by the BS a short data acknowledgment message to the network equipment indicating whether a response from the MS was received for the signaling of the MS by the BS. (FIG. 5, 502, 503, 505; page 8 lines 7-22)

(6) Grounds of Rejection to be Reviewed on Appeal

Claims 34-38 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Chen et al. (U.S. Patent Application Publication Number 2003/0157945, hereinafter "Chen"), claims 1, 6 and 28 stand rejected under 35 U.S.C. § 103(a) as being anticipated by Magee et al. (U.S. Patent Application Publication Number 2004/0198379, hereinafter "Magee") in view of Blackett et al. (U.S. Patent Application Publication Number 2004/0138834, hereinafter "Blackett"), and claims 2, 7-9, 12-14, 17, 27 and 29-33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Magee in view of Blackett and further in view of Chen. The appellants dispute these rejections.

(7) Argument

Rejections under 35 U.S.C. §112, first paragraph

None.

Rejections under 35 U.S.C. §112, second paragraph

None.

Rejections under 35 U.S.C. §102

Group 1 – Claims 34-38

Claim 34 provides (underlined language being relevant to the argument presented below):

> 34. (previously presented)A method comprising:
> receiving, by a base station (BS) from network equipment, a short data delivery message;
> signaling by the BS a mobile station (MS) in response to the short data delivery message;
> sending by the BS a short data acknowledgment message to the network equipment indicating whether a response from the MS was received for the signaling of the MS by the BS.

In the Final Office Action mailed September 26, 2006 (hereinafter "FOA") and in the Advisory Action mailed December 19, 2006 (hereinafter "AA"), the Examiner cites Chen, particularly Chen [0053], as teaching what is claimed. Chen [0049-0054] reads (emphasis added):

> [0049] In one embodiment, the packet data is in the dormant state 402, with PPP connected. The PDSN may send 404 packet data to the PCF on the existing PPP connection, e.g. A10 connection, associated with a specific mobile. The PCF may send 406 the packet data to the BSC, e.g. in short data bursts on an A9 connection. The PCF may also buffer the packet data.
> [0050] The BSC may acknowledge the receipt of the A9-SDB message from the PCF by returning 408 an, e.g., A9-SDB, acknowledge message, **which may include an indication that the BSC may attempt to send the data to the mobile as a SDB**. ThePCF may then discard the data that it had buffered.
> [0051] **The BSC may send the packet data, e.g., in SDB form, directly to the mobile, or alternatively the BSC may use the ADDS page procedure.** The BSC may decide to

deliver the data to the mobile over the traffic channel by first bringing up the traffic channel. If the BSC directly sends 410 the SDB to the mobile, the mobile may send 412, e.g., a layer 2, acknowledgement in response to the SDB received from the BSC. If the acknowledgement is not received from the mobile, the BSC may choose not to send the data or may rely on the MSC to deliver the data via ADDS Page procedure.

[0052] If the BSC could not successfully send the SDB to the mobile in step 410, **the BSC may send 414 the SDB data to the MSC** in a BSC service request message. The MSC may acknowledge the reception of the BSC service request message by sending 416 a BSC service response to the BSC. The MSC may send 418 an ADDS Page message to the BSC(s) with the data burst type field in the ADDS user part element set to SDB, and the SDB included in the application data message field. The BSC may forward 420 the SDB to the mobile. An, e.g., layer 2, acknowledgement may be sent 422 by the mobile after receiving the SDB from the BSC.

[0053] **If the MSC had included a tag element in the ADDS page message, the BSC may return 424 an ADDS page acknowledge message to the MSC after receiving the acknowledge 422 from the mobile. The BSC may send 426 an, e.g.,A9-update-A8, message to the PCF to indicate successful transmission of the SDB to the mobile**. The PCF may send 428 an, e. g., A11, registration request with the SDB airlink record to the PDSN. The PDSN may respond 430 with an, e.g., A11, registration reply message. The PCF may respond 432 to the BSC with an, e.g., A9, update acknowledge.

[0054] **Having the BSC directly deliver the SDB to the mobile may minimize the delay, but the mobile may not receive the SDB because it may have moved out of the BSC service area by the time the SDB arrives**. Since the MSC maintains mobile location information, ADDS Page ensures that the mobile receives the SDB. However, this procedure may incur a larger delay, since the BSC has to send the SDB to the MSC first, and then the MSC sends the SDB to the appropriate BSCs to perform the ADDS Page.

However, the appellants submit that Chen does not teach or suggest sending by the BS a short data acknowledgment message to **the network equipment** (from which it received a short data delivery message) **indicating whether a response from the MS was received** for the signaling of the MS, **by the BS** in response to the short data delivery message. Rather, the appellants submit that Chen teaches merely that the "BSC may acknowledge the receipt of the A9-SDB message from the PCF by returning 408 an, e.g., A9-SDB, acknowledge message, which may include an indication **that the BSC may attempt to send the data to the mobile as a SDB**" (Chen [0050], emphasis added) and that "If the BSC could not successfully send the SDB to the mobile in step 410, the BSC may send 414 **the SDB data to the MSC in a BSC service request message**" (Chen [0052], emphasis added).

Moreover, the Examiner suggests that message 426 in Chen [0053] teaches sending by the BS a short data acknowledgment message to the network equipment (from which it received

the short data delivery message) **indicating whether a response from the MS was received** for the **signaling of the MS, by the BS**, in response to the short data delivery message. However, Chen [0053] teaches that message 426 is sent "to indicate successful transmission of the SDB to the mobile" **by the MSC via ADDS paging mechanism**. Chen [0052] and Chen [0054] teach that the BSC may send the SDB to the MSC instead of the MS for delivery via ADDS paging. Thus, message 426 does not indicate whether a response from the MS was received for the **signaling of the MS by the BS**, as the claim recites.

Since Chen does not teach all of the limitations of independent claim 34, or therefore, all the limitations of dependent claims 35-38, it is asserted that anticipation has not been shown by the Examiner. Appellants submit that claims 34-38 are not anticipated by the cited reference and request that the Examiner be REVERSED.

Rejections under 35 U.S.C. §103

Group 2 – Claims 1 and 6

Claim 1 provides (underlined language being relevant to the argument presented below):

1. (previously presented)A method for enabling wireless presence-based services comprising:

monitoring, by a wireless communications network, messaging and messaging responses of a mobile station (MS), wherein the messaging and the messaging responses do not specify a presence state of the MS or a presence state change by the MS;

inferring, by the wireless communications network, a change in the presence state of the MS based upon the monitoring, wherein inferring comprises inferring the MS presence state has changed when the presence state of the MS indicates that the MS is present and messaging is detected that indicates MS activity from the group consisting of powering down, deregistering, entering an unavailable mode, handing off outside the wireless communication network, and involved in other communication;

communicating, by the wireless communications network, the state change to a presence server.

The Examiner cites FIG. 2 boxes 110 and 112 and Magee [0014] as teaching this claim language. Magee [0014-0017] (the text describing FIG. 2 boxes 110 and 112 is included in Magee [0016-0017]) reads (emphasis added):

[0014] Instant messaging and presence server (IMPS) 70 is coupled to location server 60 and to presence proxy 50. Presence proxy 50, location server 60 and presence server 70 comprise the packet switched portion of the home network 100. When location server 60 detects the mobile station 10 within a particular geographic area for which presence services are available, location server 60 sends a signal which triggers presence server 70. Presence server 70 evaluates the particular subscriber 10 against the stored contact list. If the contact list and its associated database indicate notification of presence services are permissible, presence server 70 sends the information via presence proxy 50 to mobile station 10 via base station 20. Location server 60 detects particular conditions for transmitting the triggering signal to presence server 70. For example, if mobile station 10 has entered a shopping mall, school or sports stadium, for example.

[0015] Typically, **the mobile station 10 determines its geographic location and updates location server 60 with its location**.

[0016] Referring to FIG. 2, a flow chart of the operation of the mobile station or device 10 is shown. The process is started and block 110 is entered. The user or subscriber powers on the mobile station, block 110. Next, block 112 is entered which the mobile station determines whether it is provisioned for the presence feature. If the mobile station 10 is not equipped or provisioned with the presence feature, block 112 transfers control to block 114 which ends the process.

[0017] If the mobile device is equipped with the presence feature, block 112 transfers control to block 116 via the yes path. In block 116 the subscriber requests location notification lists from the presence server 70. Next, in block 118 the presence server 70 downloads or transmits the notification list associated with that geographic location to the mobile station 10.

The claims recite that the messaging and the messaging responses monitored **do not specify a presence state of the MS or a presence state change by the MS**. Assuming one equates "location" with "presence state," as it appears the Examiner is doing, Magee [0015] appears to teach away from this portion of the claim language with the MS determining its geographic location and then updating the location server 60 with its location, i.e., specifying its location.

The amended claims also recite that inferring comprises inferring **the MS presence state has changed when** the presence state of the MS indicates that the MS is **present** and **messaging is detected that indicates MS activity** from the group consisting of **powering down, deregistering, entering an unavailable mode, handing off outside the wireless communication network,** and **involved in other communication**. The Examiner recognizes that Magee does not specifically disclose this language and relies on the teaching of Blackett

[0133] to fill in the gap.

However, the appellants submit that the teaching of Blackett in this respect is quite general in nature, stating simply that "If the client or user detects or has an event which may alter its status or presence then the presence or status is re-determined 1525 and 2) if a pre-determined time has elapsed 1540 without any event then the presence or status is determined again 1525." The Examiner seems to argue that since the operational result is the same, a change in the presence state after an event / time period has elapsed, that the teaching of Magee and Blackett make the present claims obvious. The appellants agree with the Examiner that "the combination of Magee and Blackett does not specifically teach or suggest the group" of events recited in claim 1. Claim 1 addresses how to specifically determine the presence state. Thus, the appellants submit that Magee and Blackett do not make obvious what the present claims recite, i.e., the use of messaging that indicates specific types of MS activity to infer a change in the presence state of the MS.

Since neither Magee nor Blackett, either independently or in combination, teaches all of the limitations of independent claim 1, or therefore, all the limitations of dependent claim 6, it is asserted that a prima facie case for obviousness has not been shown by the Examiner. Appellants submit that claims 1 and 6 are fully patentable over the cited references and request that the Examiner be REVERSED.

Group 3 – Claim 28

Claim 28 provides (underlined language being relevant to the argument presented below):

28. (previously presented)A wireless communications network comprising:

wireless transceiver equipment adapted to receive messaging and messaging responses of a mobile station (MS);

a wireless presence proxy, communicatively coupled to the wireless transceiver equipment,

adapted to monitor the messaging and the messaging responses of the MS, wherein the messaging and the messaging responses do not specify a presence state of the MS or a presence state change by the MS,

adapted to infer a change in the presence state of the MS based upon the monitoring, wherein being adapted to infer comprises being adapted to infer the MS presence state has changed when the presence state of the MS indicates that the MS is present and messaging is detected that indicates MS activity from the group consisting of powering down,

deregistering, entering an unavailable mode, handing off outside the wireless communication network, and involved in other communication,

adapted to communicate the state change to a presence server.

The Examiner cites FIG. 2 boxes 110 and 112 and Magee [0014] as teaching this claim language. Magee [0014-0017] (the text describing FIG. 2 boxes 110 and 112 is included in Magee [0016-0017]) is quoted above in the Group 2 arguments. The claim recites that the messaging and the messaging responses monitored **do not specify a presence state of the MS or a presence state change by the MS**. Assuming one equates "location" with "presence state," as it appears the Examiner is doing, Magee [0015] appears to teach away from this portion of the claim language with the MS determining its geographic location and then updating the location server 60 with its location, i.e., specifying its location.

The amended claims also recite that being adapted to infer comprises being adapted to infer **the MS presence state has changed when** the presence state of the MS indicates that the MS is **present** and **messaging is detected that indicates MS activity** from the group consisting of **powering down, deregistering, entering an unavailable mode, handing off outside the wireless communication network,** and **involved in other communication**. The Examiner recognizes that Magee does not specifically disclose this language and relies on the teaching of Blackett [0133] to fill in the gap.

However, the appellants submit that the teaching of Blackett in this respect is quite general in nature, stating simply that "If the client or user detects or has an event which may alter its status or presence then the presence or status is re-determined 1525 and 2) if a pre-determined time has elapsed 1540 without any event then the presence or status is determined again 1525." The Examiner seems to argue that since the operational result is the same, a change in the presence state after an event / time period has elapsed, that the teaching of Magee and Blackett make the present claims obvious. The appellants agree with the Examiner that "the combination of Magee and Blackett does not specifically teach or suggest the group" of events recited in claim 28. Claim 28 addresses how to specifically determine the presence state. Thus, the appellants submit that Magee and Blackett do not make obvious what the present claims recite, i.e., the use of messaging that indicates specific types of MS activity to infer a change in the presence state of the MS.

Since neither Magee nor Blackett, either independently or in combination, teaches all of

the limitations of claim 28, it is asserted that a prima facie case for obviousness has not been shown by the Examiner. Appellants submit that claim 28 is fully patentable over the cited references and request that the Examiner be REVERSED.

Group 4 – Claims 2, 7-9, 12-14, 17, 27 and 29-33

Claims 2, 7-9, 12-14, 17, 27 and 29-33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Magee in view of Blackett and further in view of Chen. These claims are ultimately dependent upon one of claims 1 and 28, which claims have been shown above to be allowable over Magee in view of Blackett. The appellants therefore respectfully submit that these dependent claims may be allowed on that basis. The appellants will also note for the record that these claims further introduce additional limitations that, particularly when considered in context with the claim(s) from which they depend, constitute incremental patentable subject matter. For the moment and for the sake of brevity however, the appellants are content to rely upon the positions already set forth above.

The appellants respectfully submit that claims 2, 7-9, 12-14, 17, 27 and 29-33 are allowable over the references of record and respectfully request that the Examiner be REVERSED.

(8) Conclusion

For the above reasons, the appellants respectfully submit that the rejection of each of claims 1, 2, 6-9, 12-14, 17, and 27-38 is in error and that these errors should be reversed and the claims allowed.

Lastly, please charge any additional fees (including extension of time fees) or credit overpayment to Deposit Account No. **502117 -- Motorola, Inc**.

Respectfully submitted,
V. Oprescu-Surcobe et al.

By: /Jeffrey K. Jacobs/

Jeffrey K. Jacobs
Attorney for Appellant(s)
Registration No. 44,798
Phone No.: 847/576-5562
Fax No.: 847/576-3750

(9) Claims Appendix

1. (previously presented) A method for enabling wireless presence-based services comprising:

monitoring, by a wireless communications network, messaging and messaging responses of a mobile station (MS), wherein the messaging and the messaging responses do not specify a presence state of the MS or a presence state change by the MS;

inferring, by the wireless communications network, a change in the presence state of the MS based upon the monitoring, wherein inferring comprises inferring the MS presence state has changed when the presence state of the MS indicates that the MS is present and messaging is detected that indicates MS activity from the group consisting of powering down, deregistering, entering an unavailable mode, handing off outside the wireless communication network, and involved in other communication;

communicating, by the wireless communications network, the state change to a presence server.

2. (original) The method of claim 1, wherein the messaging responses comprise responses from the group consisting of a page response, a short data burst (SDB) acknowledgment, a status response message, a short message service (SMS) acknowledgment, and a layer 2 acknowledgment.

3-5. (canceled)

6. (original) The method of claim 1, wherein inferring comprises:

inferring the MS presence state has changed when the presence state of the MS indicates that the MS is non-present and messaging is detected that indicates MS activity from the group consisting of powering up, registering, exiting an unavailable mode, handing off into the wireless communication network, and performing other communication.

7. (original) The method of claim 1, further comprising:

signaling, by the wireless communications network, the MS with messaging to which the MS is required to respond.

8. (original) The method of claim 7, wherein messaging to which the MS is required to respond comprises messaging from the group consisting of a page, a short data burst (SDB) message, a status request message, and a short message service (SMS) message.

9. (original) The method of claim 7,

wherein monitoring comprises maintaining last-known-location information for the MS based on the messaging and the messaging responses,

wherein signaling the MS comprises signaling the MS in a group of at least one cell based on the last-known-location information for the MS.

10. (canceled)

11. (canceled)

12. (original) The method of claim 7, wherein monitoring comprises receiving, by the wireless communications network, a messaging response in response to the signaling and wherein the method further comprises:

inferring, by the wireless communications network, no change in a presence state of the MS based upon the monitoring;

confirming, by the wireless communications network, the presence state to a presence server.

13. (original) The method of claim 7,

wherein monitoring comprises detecting that a period of time has passed after signaling the MS in which no response to the signaling has been received,

wherein the no response within the period of time is a messaging response,

wherein inferring comprises inferring a change in the presence state of the MS based upon the messaging response when the presence state of the MS indicates that the MS is present.

14. (original) The method of claim 7,

wherein monitoring comprises detecting that a period of time has passed after repeatedly signaling the MS in which no response to the signaling has been received,

wherein the no response within the period of time is a messaging response,

wherein inferring comprises inferring a change in the presence state of the MS based upon the messaging response when the presence state of the MS indicates that the MS is present.

15. (canceled)

16. (canceled)

17. (original) The method of claim 7,

wherein the wireless communications network comprises a control function and a base station (BS),

wherein the control function sends a signaling request message to the BS,

wherein signaling the MS comprises signaling by the BS in response to the signaling request message.

18-26. (canceled)

27. (original) The method of claim 17,

wherein inferring comprises inferring, by the control function, a change in the presence state of the MS based upon the monitoring;

wherein communicating comprises communicating, by the control function, the state change to a presence server.

28. (previously presented) A wireless communications network comprising:

wireless transceiver equipment adapted to receive messaging and messaging responses of a mobile station (MS);

a wireless presence proxy, communicatively coupled to the wireless transceiver equipment,

adapted to monitor the messaging and the messaging responses of the MS, wherein the messaging and the messaging responses do not specify a presence state of the MS or a presence state change by the MS,

adapted to infer a change in the presence state of the MS based upon the monitoring, wherein being adapted to infer comprises being adapted to infer the MS presence state has changed when the presence state of the MS indicates that the MS is present and messaging is detected that indicates MS activity from the group consisting of powering down, deregistering, entering an unavailable mode, handing off outside the wireless communication network, and involved in other communication,

adapted to communicate the state change to a presence server.

29. (original) The wireless communications network of claim 28, wherein the presence server comprises a presence server from the group consisting of an instant messaging (IM) server and a push-to-talk (PTT) server.

30. (original) The wireless communications network of claim 28, wherein the messaging responses comprise responses from the group consisting of a page response, a short data burst (SDB) acknowledgment, a status response message, a short message service (SMS) acknowledgment, and a layer 2 acknowledgment.

31. (original) The wireless communications network of claim 28, wherein the wireless presence proxy is further adapted to signal via the wireless transceiver equipment the MS with messaging to which the MS is required to respond.

32. (original) The wireless communications network of claim 31,

wherein monitoring comprises detecting that a period of time has passed after repeatedly signaling the MS in which no response to the signaling has been received,

wherein the no response within the period of time is a messaging response,

wherein inferring comprises inferring a change in the presence state of the MS based upon the messaging response when the presence state of the MS indicates that the MS is present.

33. (original) The wireless communications network of claim 31,

wherein monitoring comprises maintaining last-known-location information for the MS based on the messaging and the messaging responses,

wherein signaling the MS comprises signaling the MS in a group of at least one cell based on the last-known-location information for the MS.

34. (previously presented) A method comprising:

receiving, by a base station (BS) from network equipment, a short data delivery message;

signaling by the BS a mobile station (MS) in response to the short data delivery message;

sending by the BS a short data acknowledgment message to the network equipment indicating whether a response from the MS was received for the signaling of the MS by the BS.

35. (previously presented) The method of claim 34, wherein sending by the BS a short data acknowledgment message to the network equipment indicating whether a response from the MS was received comprises

in response to receiving by the BS an acknowledgment from the MS in response to the signaling by the BS, sending by the BS a short data acknowledgment message to the network equipment indicating that a response from the MS was received.

36. (previously presented) The method of claim 34, wherein the short data delivery message comprises a message of a type that is used for conveying a small, limited amount of data to an MS.

37. (previously presented) The method of claim 34,

wherein the short data delivery message indicates a signaling location within which to signal the MS and

wherein signaling the MS in response to the short data delivery message comprises signaling the MS in the signaling location indicated.

38. (previously presented) The method of claim 37, wherein the signaling location indicated comprises location information of a type from the group consisting of a cell ID, a base station ID, a list of cell IDs, and a location area code (LAC).

(10) Evidence Appendix

Not applicable.

(11) Related Proceeding Appendix

Not applicable.